

IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF ILLINOIS **FILED**  
EASTERN DIVISION

BALLY MANUFACTURING CORPORATION, )  
Plaintiff, ) H. STUART CUNNINGHAM  
v. ) CLERK, U. S. DISTRICT COURT  
D. GOTTLIEB & CO., ) CIVIL ACTION  
WILLIAMS ELECTRONICS, INC. ) No. 78 C 2246 **DOCKETED**  
and )  
ROCKWELL INTERNATIONAL CORPORATION, ) MAR 29 1984  
Defendants. ) Judge John F. Grady

DEFENDANTS' SUBMISSION ON THE "MAN SKILLED IN THE ART"

The Court has asked us to address ourselves to cases resolving the question of obviousness when there is more than one technology involved. In this case, is the ordinary man skilled in the art a person skilled in electronics having knowledge of pinball games, or is it rather a person skilled in pinball games having knowledge of electronics?

Defendants believe that the person skilled in the art to which the patent in suit pertains is a digital electronics engineer proficient in microprocessor applications and having a working knowledge of pinball. The evidence adduced in this case fully supports that view.

Norman Clark, a Bally pinball game designer, and Alphonse Gregg, a former employee of the defendant Williams,

both testified on behalf of Bally. In their view, the electromechanical engineers employed by the pinball industry were incapable of accomplishing the task of uniting microprocessor electronics and pinball games. (TR 809, 2358).

When Nutting decided to attempt the application of a microcomputer to a pinball game, he hired Frederiksen, a person with some skill in electronics, and educated him in pinball for that purpose. (TR pp. 71, 636).

In 1973, Bally hired Bracha, an electronics engineer, and in 1974, Bracha in turn hired Engelhardt, another electronics engineer. Engelhardt learned pinball and worked on the task of applying the microcomputer to pinball.

Further, there is no serious dispute but that the patent in suit, as explained by Dr. Schoeffler, can only be comprehended by someone skilled in the digital electronics art with background in microprocessors, microprocessor programming and pinball. It was far easier and more common for persons having skills in digital electronics to acquire some knowledge of pinball games than it was for persons having knowledge of pinball games to acquire the required knowledge of digital electronics including the solution of the much talked about noise problems.

Thus, the person skilled in the art is a person having knowledge of digital electronics techniques including

digital computer applications, and a working understanding of a pinball game, i.e., that pinball involved detection of a varying sequence of switch closures, actuation of solenoids, the lighting of lights, and the displaying of scores.

The situation facing the Court was fully recognized and commented upon in Geo. J. Meyer Mfg. Co. v. San Marino Electronic Corp., 422 F.2d 1285 (9th Cir. 1970) where the court said at page 1288:

"It may be that at an earlier time in our history most inventions relating to locks were made by locksmiths and most inventions relative to plows were made by those who made or used plows. At that time and in those days perhaps the 'subject matter' of the invention was the lock or plow and the 'art' the art of lock and plow making. In today's world, a world of extensive and rapid communication of scientific and industrial knowledge -- a world of institutions of higher learning and private laboratories which gather men of all disciplines and direct their talents not only to the discovery of basic truths but to the solutions of specific problems, the questions arising in a particular industry are answered not only by those who have learned the lessons of that industry but also by those trained in scientific fields having no necessary relationship to the particular industry. These considerations lead us to believe that today the word 'art' includes not only the knowledge accumulated with respect to a problem in a particular industry but that accumulated in those scientific fields the techniques of which have been commonly employed to solve problems of a similar kind in the particular and closely related fields."

In full accord with this is Weather Engineering Corp. of America v. United States, 614 F.2d 281 (Ct. Cl. 1980), in which the Court affirmed a holding of the Trial Judge wherein he concluded that:

"\*\*\* the level of ordinary skill in the art is that of an applied meteorologist having some acquaintance with the construction and use of explosives." (614 F.2d. at p. 289.)

In Sargent Industries, Inc. v. Sunstrand Corp., F.Supp., \_\_\_\_ 189 U.S.P.Q. 225 (N. D. Ill. 1975) (Flaum, J.) the intermingling of technologies to determine the scope of the prior art and the level of skill in the prior art was again recognized when the Court at page 232 said, (citing with approval, Geo. Meyer v. San Marino) (copy attached):

"The modern profusion of separate technical disciplines and corresponding fields of application requires a broad application from one field of art to another."

The foregoing authorities are consistent with the holding of Digitronics Corp. v. New York Racing Ass'n., 553 F.2d 740 (2nd Cir. 1977) where the Court said in a situation where the alleged invention lay in the field of the application of electronic and computer technology to the field of horse-racing parimutuel betting machines that:

"\*\*\* the court must look, in light of both the training of the patentee and the elements in the claimed invention which give it its novel quality, at what arts the patentee could reasonably be expected to consult in doing the inventing. Here, as Judge Dooling found, the inventors were trained in data processing, not merely in totalisators." (553 F.2d at p. 745).

Our record and the law require in this case that the hypothetical person of ordinary skill in the pertinent art is one who has knowledge of digital electronics including microprocessor application techniques and has acquired knowledge of pinball. As the Supreme Court said in Dann v. Johnston, 425 U.S. 219 (1976):

"\*\*\* while computer technology is an exploding one 'till being an even handed application to require that those persons be granted the benefit of a patent monopoly be charged with an awareness' of that technology."

In sum, the cases recognize that in a given situation a person of ordinary skill in the art may be required to have some knowledge of more than one technology and in particular should be familiar with the technology which addresses his problem in completing the alleged invention. Strato Flex, Inc. v. Aeroquip Corp. 713 F.2d 1530, 1535 (C.A.F.C. 1983). (The art is that "reasonably pertinent to the particular problem with which the invention was involved").

In this case the problem involved adapting a microprocessor to pinball. Such a task requires skill in the digital electronics art including a microprocessor application technology and an understanding of pinball games.

No significance can be attached to a recognition that noise would be a design consideration. That was apparent to all.

Mr. Gregg, a pinball engineer (TR 2346, 2347, 2394) and even Mr. Stern, a non technical person working for Williams (TR 2500-2501) knew it had to be dealt with. Most certainly it was immediately recognized by Mr. Engelhardt, Bally's electronics engineer (TR 2394).

These facts stand as the proof of awareness of the noise consideration of all who thought about or were confronted with the task of marrying a microprocessor to a pinball game.

As the C.C.P.A., a predecessor of the C.A.F.C., said in Application of Theis, 610 F.2d 786 (1979) at page 793:

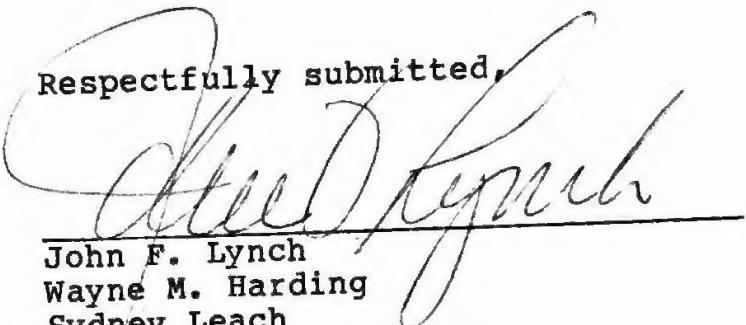
"\*\*\* spurious noise from radio interference and other nearby equipment, drifting filter, and arcing relay contacts were solvable by routine debugging, setup, and installation adjustments." (Emphasis added)

#### Conclusion

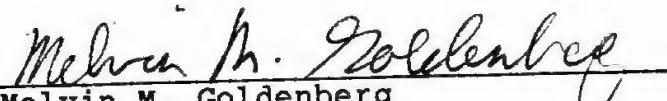
The concept of an ordinary man skilled in the art having skills in more than one technology has been judicially recognized. The facts in this case demonstrate that such a

person is a composite having digital electronics skills, proficiency in microprocessor applications, and knowledge of pinball. Such a person would: (1) know that noise would have to be dealt with because he had encountered it before; and (2) have available to him an assortment of remedies upon which he could draw.

Respectfully submitted,

  
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Under §103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. As indicia of obviousness or nonobviousness, these inquiries may have relevancy.

Defendant suggests that the subject matter of this patent is sufficiently uncomplicated to make expert testimony unnecessary; in its view, the Court, in order to resolve the obviousness issue, has but to read and compare the '532 patent with the patents cited as prior art. If this were so summary judgment might be appropriate. Plaintiff, however, asserts that there are special problems associated with the development of a flexible connector, having both angular and rotary movement, for use with coil springs in a filtration unit, that these problems cannot be fully understood or appreciated merely by reading a patent of the invention which ultimately solved them, and that these problems are highly relevant to the question of what would have been obvious to a skilled artisan reviewing the prior art. While the Court heard far more from plaintiff's counsel at oral argument about these problems than can be gleaned from the summary judgment record which he developed, I think that the Albohn affidavit contains sufficient support for plaintiff's argument to foreclose summary judgment on the obviousness issue.

The Court is in no better position to make a determination at this point with respect to defendant's claim that the '532 patent is invalid for fraud and unclean hands. Defendant alleges that in failing to disclose the six search patents to the examiner, plaintiff knowingly and intentionally withheld relevant prior art from the Patent Office. Plaintiff responds that there was never any intention of deceiving the examiner, that the examiner was told about the best art, that he was aware of art at least as pertinent as the six search patents, and that in any case he is presumed to have known about at least two of the six search patents.<sup>4</sup>

<sup>4</sup> Plaintiff asserts that one of the search patents was within the examiner's field of search and, therefore, presumptively known to him and

[2] Intent to deceive is, of course, the kind of issue particularly unsuited for summary judgment treatment. Moreover, to the extent the issues raised by these contentions turn on which prior art is more pertinent, this question would best be resolved on a record of the kind which I have indicated would be appropriate for resolving the obviousness issue. Summary judgment will be denied.

[3] Submit order.<sup>5</sup>

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#### District Court, N. D. Illinois, E. Div.

*Sargent Industries, Inc. v. Sundstrand Corporation*

No. 73 C 1942 Decided Dec. 18, 1975

#### PATENTS

##### 1. Construction of specification and claims — By specification and drawings — In general (§22.25)

##### Construction of specification and claims — "Means" claims (§22.60)

Although feature disclosed in specification is not specifically mentioned in claims, which use ambiguous term "means" where feature might have been cited, it is proper to construe "means" as referring to feature, since no other mechanism is suggested by claims at issue, and specification and other

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another was cited against the '532 patent which itself was cited to the examiner.

<sup>5</sup> Also before the Court is a motion based on Rule 11 to strike the allegations of defendant's counterclaim relating to fraud on the Patent Office. The question of whether defendant's counsel violated Rule 11 is close. In the context of this case, however, I do not consider the requested relief appropriate even assuming a Rule 11 violation. Rule 11 was not pressed at the outset and discovery went forward. Through discovery that would have taken place regardless of the presence or absence of a fraud claim, defendant has now developed what it believes to be a basis for such a claim. The Court, on the present record, cannot say this claim is made in bad faith. Plaintiff's motion will be denied.